

AMENDMENTS TO THE CLAIMS

1. (Original) An interconnect for an attitude control device, comprising:
at least one bus adapted to provide at least one bus signal to the attitude control device;
and
a plurality of electrical contacts external to the attitude control device and capable of providing a signal indicative of a physical location of the attitude control device when the attitude control device is installed.
2. (Original) The interconnect of claim 1, wherein the plurality of electrical contacts includes:
a first electrical contact capable of providing a reference; and
at least one second electrical contact electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the attitude control device when the attitude control device is installed.
3. (Original) The interconnect of claim 2, wherein the at least one second electrical contact is a socket.
4. (Original) The interconnect of claim 2, wherein the at least one second electrical contact is a solderable electrical contact.

5. (Original) The interconnect of claim 2, wherein the first electrical contact is adapted to contact a corresponding electrical contact on the attitude control device when the attitude control device is installed.

6. (Original) The interconnect of claim 5, wherein the first electrical contact is a socket.

7. (Original) The interconnect of claim 5, wherein the first electrical contact is a solderable electrical contact.

8. (Currently Amended) The interconnect of claim 1, wherein the plurality of electrical contact ~~contact~~ contacts includes:

a first electrical contact capable of providing a reference; and

at least one second electrical contact optionally electrically coupled to the first electrical contact, the at least one second electrical contact being adapted to contact a corresponding electrical contact on the attitude control device when the attitude control device is installed.

9. (Original) The interconnect of claim 8, further comprising at least one fuse deployed intermediate the first electrical contact and the at least one second electrical contact such that the at least one second electrical contact is capable of being optionally electrically coupled to the first electrical contact.

10. (Original) The interconnect of claim 1, further comprising at least one circuit element deployed intermediate the first electrical contact and the at least one second electrical contact.

11. (Original) The interconnect of claim 10, wherein the at least one circuit element comprises at least one of a resistor, a capacitor, and a voltage reference circuit.
12. (Original) The interconnect of claim 10, wherein the at least one circuit element comprises a trace having a selected length.
13. (Original) The interconnect of claim 12, wherein the selected length of the trace is selected to provide a selected resistance.
14. (Original) The interconnect of claim 1, wherein the at least one bus comprises at least one trace adapted to provide at least one of a control signal, a command signal, and a power signal to the attitude control device.
15. (Original) The interconnect of claim 1, further comprising a flexible substrate.
16. (Original) The interconnect of claim 15, wherein the plurality of electrical contacts external to the attitude control device are fabricated onto the flexible substrate.
17. (Original) The interconnect of claim 15, wherein the at least one bus is fabricated onto the flexible substrate.

18. (Original) A system for determining a position of at least one attitude control device deployed on a guided missile, comprising:

at least one bus capable of transmitting at least one bus signal;

a plurality of interconnects, each being capable of receiving the bus signal from the bus and providing the bus signals to at least one attitude control device associated with the interconnect; and

a plurality of electrical contacts, at least two of the plurality of electrical contacts being associated with each of the interconnects and being capable of providing a signal indicative of a physical location of the interconnect to the attitude control device associated with the interconnect when the attitude control device is installed.

19. (Original) The system of claim 18, wherein the electrical contacts associated with each of the plurality of interconnects include:

a first electrical contact capable of providing a reference; and

at least one second electrical contact electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the attitude control device when the attitude control device is installed.

20. (Original) The system of claim 19, further comprising at least one circuit element deployed intermediate the first electrical contact and the at least one second electrical contact.

21. (Original) The system of claim 20, wherein the at least one circuit element comprises at least one of a resistor, a capacitor, a voltage reference circuit, and a trace having a selected length.

22. (Original) The system of claim 18, wherein the electrical contact includes:
a first electrical contact capable of providing a reference; and
at least one second electrical contact optionally electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the attitude control device when the attitude control device is installed.

23. (Original) The system of claim 18, wherein the at least one bus comprises at least one trace adapted to provide at least one of a control signal, a command signal, and a power signal to the at least one attitude control device.

24. (Original) The system of claim 18, further comprising a controller communicatively coupled to the bus and capable of providing the bus signal comprising at least one of a control signal, a command signal, and a power signal to the bus.

25. (Original) The system of claim 24, wherein the controller is deployed within the guided missile.

26. (Original) The system of claim 24, further comprising a transceiver coupled to the bus, and wherein the controller is deployed external to the guided missile and is communicatively coupled to the transceiver.

27. (Original) The system of claim 18, further comprising a flexible substrate having a plurality of openings formed therein.

28. (Original) The system of claim 27, wherein each of the plurality of interconnects are deployed proximate a corresponding one of the openings.

29. (Original) The system of claim 28, wherein the at least two of the plurality of electrical contacts associated with each of the interconnects is deployed proximate the corresponding one of the openings.

30. (Original) The system of claim 27, wherein the at least one bus is formed onto the flexible substrate.